

ANTI-CLOGGING PAINTBALL FIRING MECHANISM

Abstract of the Disclosure

A mechanism for preventing the chopping by the firing bolt of a paintball stuck or only partially inserted into the gun barrel. The bolt comprises an axial channel admitting compressed gas through a radial intake port in the proximal section of the bolt and leading the gas through a elbow-zone and an axial portion to a discharge port at the leading edge of the bolt. A sleeve slidingly engaged over the bolt as a radial aperture which is maintained in line with the intake port by a compressible coil spring, and has a leading portion extending ahead of the bolt. When the firing mechanism translates the bolt and sleeve to place the intake port and aperture in line with a gas-supplying outlet, any obstruction in the gun barrel upon being contacted by the leading edge of the sleeve, causes the sleeve to resiliently slide backward. The misalignment of the aperture and intake port prevents gas from expanding through the bolt channel and into the gun barrel. In the absence of any obstruction in the gun barrel, the expansion of the gas against the elbow-zone of the bolt channel exerts backward pressure on the bolt facilitating its recoiling toward the next firing position.